

WILSON, DRUID

1948. Notes on *Perplicaria* DALL and its systematic position.
The Nautilus 61 (4): 112 - 114

WOODRING, WENDELL PHILLIPS

1928. Miocene mollusks from Bowden, Jamaica: Part II:
Gastropods and discussion of results. Carnegie Inst.
Washington, publ. no. 385. pp. i - vii + 1 - 564; pls. 1 - 40;
3 text figs. (28 November 1928)
[p. 224; plt. 13, fig. 2]

Northern and Southern Range Extensions of *Aplysia vaccaria*

(Gastropoda : Opisthobranchia)

BY

JAMES R. LANCE

THE GIANT BLACK SEA HARE *Aplysia vaccaria* WINKLER, 1954, although locally common, has been reported from a very narrow range extending from San Pedro, California, to the vicinity of Cabo Colnett on the Pacific side of the Baja California Peninsula (FARMER, 1967). The fact that this enormous gastropod has not been indicated from additional localities is perplexing since it is possibly the world's largest, and consequently one of the most conspicuous, of all intertidal invertebrates. Individuals measuring 15 inches in length are not uncommon at Laguna Beach, Doheny Beach, La Jolla and Point Loma (California) at least during the winter and early spring. Subtidal specimens from off La Jolla have been reported to attain a length of up to 30 inches (WINKLER & DAWSON, 1963).

During a field trip to the rocky intertidal area at Hammond's Point, Santa Barbara, on November 12, 1966, I observed about 20 individuals of this species interspersed among an equal number of the smaller and lighter colored *Aplysia californica* COOPER, 1863. Mr. Gale Sphon, of the Santa Barbara Museum of Natural History, informs me that *A. vaccaria* is quite common on the mud flats in Morro Bay. These observations extend the range about 200 miles to the northwest. It is likely that Morro Bay and its environs will prove to be the northern limit of *A. vaccaria* since it is unknown from the Monterey peninsula and regions to the north, where collecting is rather intense.

On April 12 and May 14, 1964, Miss Joan E. Steinberg and I observed *Aplysia vaccaria* to be an abundant inhab-

itant of the rocky intertidal regions at Bahía de los Angeles in the northern part of the Gulf of California. Fewer numbers of *A. californica* were also observed in the same habitat. This latter species has already been reported from several Gulf localities (WINKLER, 1958).

The present records add another species to the list of opisthobranchs indigenous to both the Californian and the northernmost regions of the subtropical Panamic faunal provinces summarized in an earlier paper (LANCE, 1966).

LITERATURE CITED

- COOPER, JAMES GRAHAM
1863. On new or rare mollusca inhabiting the coast of California. Proc. Calif. Acad. Nat. Sci. 3 (2): 56 - 60
- FARMER, WESLEY M.
1967. Notes on the Opisthobranchia of Baja California, Mexico, with range extensions - II. The Veliger 9 (3): 340 - 342; 1 text fig. (1 January 1967)
- LANCE, JAMES R.
1966. New distributional records of some Northeastern Pacific Opisthobranchiata (Mollusca: Gastropoda) with descriptions of two new species. The Veliger 9 (1): 69 - 81; 12 text figs. (1 July 1966)
- WINKLER, LINDSAY R.
1954. A new species of *Aplysia* on the southern California coast. Bull. South. Calif. Acad. Sci. 54: 5 - 7
1958. The range of the California sea hare *Aplysia californica* COOPER. Bull. So. Calif. Acad. Sci. 57 (2): 106 - 107; pt. 35
- WINKLER, LINDSAY R. & E. YALE DAWSON
1963. Observations and experiments on the food habits of California sea hares of the genus *Aplysia*. Pacific Sci. 17 (1): 102 - 105

¹ 744 Agate Street, San Diego, California 92109